UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/080,200 | 02/19/2002 | John F. O'Connor, JR. | 3135-18 | 9276 |

7590 12/05/2007

Attn: Russel H. Marvin
Torrington Research Company
89 Commercial Boulevard
Torrington, CT 06790

| EXAMINER | |
|---|---|
| VERDIER, CHRISTOPHER M | |
| ART UNIT | PAPER NUMBER |
| 3745 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 12/05/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/080,200 | O'CONNOR, ET AL. | |
| | Examiner | Art Unit | |
| | Christopher Verdier | 3745 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *03 January 2007 and 26 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,4-17 and 21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-17 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 January 2007* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Applicant's Amendment dated September 26, 2007 has been carefully considered but is non-persuasive. Claims 1, 4-17, and 21 are pending. The Replacement Sheets of Drawings of January 3, 2007, while appreciated, contain crossed out markings of reference numerals, which is not acceptable, as set forth later below. Concerning Applicant's argument that the features recited in claims 5 and 6 are shown in figures 7 and 8, in that numbers 32 and 34 are intended to show the axial dimension variation between each scroll subsection, the examiner respectfully disagrees. Figure 8 only shows an end view of the outlet in figure 7, and figure 7 is a front view of the scroll subsections. Figures 7 and 8 do not show the axial dimension of at least one of the two scroll sub-sections that varies as air proceeds from the impeller to a discharge opening (claim 5), and the manner in which the axial dimensions of the two sub-sections varies being different (claim 6). The deletion of claim 20 to overcome the objection to the specification as failing to provide antecedent basis for claim 20 is noted. The claims have also been amended to adopt the examiner's suggested claim language. Correction of these matters is noted with appreciation.

Applicant's argument that Williams 2,330,938 does not disclose that the partition substantially completely surrounds the impeller has been carefully considered and is persuasive. However, this feature is known in the art as shown by White 1,889,816. Concerning Applicant's argument that Williams does not disclose different and independently optimized expansion angles, but only width variations in the scroll to adapt to different flow system pressures, the examiner respectfully disagrees. Overlaying figure 4 of Williams upon figure 3 of Williams, it can be seen that the scroll section comprises discrete scroll subsections 35 and 44/45 associated

respectively with the two axially adjacent flows. Each of the scroll subsections is configured to provide a different and independently optimized expansion angle, since the scroll formation 30 in figure 4, when overlaid on figure 3, has a different expansion angle than the scroll formations 36, 37. Applicant's argument concerning Swiss Patent 132,105 is that this reference does not disclose different scroll expansions. However, the teachings of Williams and several other references as set forth later below in combination with either White or the Swiss patent render certain claims unpatentable.

***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration (filed February 19, 2002) is defective because:

It improperly claims priority under 35 USC 120 of provisional application 60/270,932.

The oath or declaration is defective because:

It states that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to the patentability as defined in 37 CFR 1.56.

Specifically, it does not include the language "I acknowledge the duty to disclose information which is material to patentability of this application in accordance with Title 37, Code of Federal Regulations Section 1.56."

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the axial dimension of at least one of the two scroll sub-sections that varies as air proceeds from the impeller to a discharge opening (claim 5), and the manner in which the axial dimensions of the two sub-sections varies being different (claim 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The Replacement Sheets of Drawings filed January 3, 2007 are objected to because in figures 1a and 3, there are crossed out corrections for the wheel diameter and for reference numeral 16, respectively. The corrections should not show the crossed out portions.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

On page 1, line 1, reference to the provisional application 60/270,932 and its filing date should be made.

### *Claim Objections*

Claims 1, 4-17, and 21 are objected to because of the following informalities: Appropriate correction is required.

In claim 1, line 9, "to" should be deleted.

In claim 6, line 2, -- at least -- should be inserted after "said"

In claim 7, line 2, -- at least -- should be inserted after "the" (last occurrence).

In claim 8, line 2, -- at least -- should be inserted after "the".

In claim 8, line 3, "a" should be changed to -- an --.

In claim 9, line 2, -- at least -- should be inserted after "the".

In claim 10, line 2, -- at least -- should be inserted after "the".

In claim 11, line 2, -- at least -- should be inserted after "the".

In claim 21, line 2, -- at least -- should be inserted after "said"

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 4-17, and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended claim 1, line 9 recites the partition "substantially completely surrounding" the periphery of the centrifugal impeller. This language adds new matter, since the original specification is limited to the partition 22 completely surrounding the periphery of the centrifugal impeller 12. The limitation "substantially completely surrounding" the periphery of the centrifugal impeller would include the partition not completely surrounding the periphery of the centrifugal impeller, which is not originally disclosed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4-17, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Amended claim 1, line 9 recites the partition "substantially completely surrounding" the periphery of the centrifugal impeller. The scope of the claims is

unclear since the specification does not identify the bounds of what "substantially completely surrounding" is. For example, is the circumferential extent of the partition 270 degrees, 355 degrees, or 360 degrees? In claim 4, line 3, "each spaced radially from out facing the periphery of the impeller" is unclear.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4, 7, 9-10, 12-15, and 21, as far as they are understood and definite, are rejected under 35 U.S.C. 103(a) as being unpatentable over White 1,889,816 in view of Japanese Patent 61-247,899 and Williams 2,330,938. White (figures 1-2) discloses a centrifugal blower

assembly substantially as claimed having a centrifugal impeller 5 that receives air axially and discharges the air radially, a scroll diffuser (unnumbered) defining a single axial inlet opening near 15 for supplying air to the impeller, and a scroll section B for collecting and discharging air from the impeller, and a partition 14 extending substantially in a radial plane mounted within a housing 3 with an inner opening receiving and having an edge in close proximity to and substantially completely surrounding the periphery of the impeller, with the partition serving to divide the scroll interior into two discrete axially adjacent flows near 12, 13 for the discharge of air from the scroll section. The scroll section comprises discrete scroll subsections 12, 13 associated respectively with the two axially adjacent flows. Discharge openings of the two subsections are arranged in adjacent side-by-side relationship to provide an aggregate discharge opening of substantially enlarged width. The scroll subsections have cutoff points (unnumbered, see figure 2) substantially at the same point circumferentially along the periphery of the impeller opening in the partition. The scroll subsections have unnumbered discharge openings with substantially parallel centerlines.

However, White does not disclose an electric motor connected drivingly to the impeller (claim 1), does not disclose that the scroll subsections are configured to provide different and independently optimized expansion angles (claim 1), does not disclose that the scroll subsections have differing configurations of their outer walls, each spaced radially from but facing the periphery of the impeller (claim 4), does not disclose that the centerlines of the flows through the subsections differ (claim 7), does not disclose that the discharge openings of two subsections are arranged in angularly spaced apart relationship (claim 10), does not disclose that the scroll

subsections have cut-off points spaced circumferentially from each other (claim 13), does not disclose that the scroll subsections have discharge openings with centerlines angularly related to each other (claim 15), and does not disclose a flow balancing restriction incorporated into at least one of the scroll subsections (claim 21).

Japanese Patent 61-247,899 (figure 1) shows a centrifugal fan 2 having an electric motor 3 associated with the fan, for the purpose of positively driving the centrifugal fan.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to drive the centrifugal blower of White with an electric motor, as taught by Japanese Patent 58-101,297, for the purpose of positively driving the centrifugal fan.

Williams shows a centrifugal blower assembly having a centrifugal impeller 60, a scroll diffuser near 20/26/36/37, and a scroll section 35, 44/45 for collecting and discharging air from the impeller, with a partition 31 having an edge in close proximity to the periphery of the impeller. The partition divides the scroll interior into two discrete axially adjacent flows near 35 and 44/45 for the discharge of air from the scroll section. The scroll section comprises discrete scroll subsections 35 and 44, 45 associated respectively with the two axially adjacent flows. The scroll subsections are configured to provide different and independently optimized expansion angles, the scroll subsections have differing configurations of their outer walls, and the scroll subsections have cut-off points 73 and 41 spaced circumferentially from each other. The centerlines of the flows through the subsections near 45 and 50 differ. The discharge openings

(near 45 and 50) of two subsections are arranged in angularly spaced apart relationship. The scroll subsections have discharge openings (near 45, 50) with centerlines angularly related to each other. These arrangements are provided for the purpose of supplying air to different locations under differing pressure conditions. A flow balancing restriction is incorporated into the scroll subsections (column 4, lines 35-40), for the purpose of controlling the direction or extent of discharged air.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified centrifugal blower of White such that the scroll subsections are configured to provide different and independently optimized expansion angles, the scroll subsections have differing configurations of their outer walls, each spaced radially from but facing the periphery of the impeller, the centerlines of the flows through the subsections differ, the discharge openings of two subsections are arranged in angularly spaced apart relationship, the scroll subsections have cut-off points spaced circumferentially from each other, and the scroll subsections have discharge openings with centerlines angularly related to each other, as taught by Williams, for the purpose of supplying air to different locations under differing pressure conditions. It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified centrifugal blower of White such that a flow balancing restriction is incorporated into the scroll subsections, as taught by Williams, for the purpose of controlling the direction or extent of discharged air.

Claim 5, as far as it is understood and definite, is rejected under 35 U.S.C. 103(a) as being unpatentable over White 1,889,816 and Japanese Patent 61-247,899 and Williams 2,330,938 as applied to claim 1 above, and further in view of Forni 5,156,524. The modified blower assembly of White shows all of the claimed subject matter except for the axial dimension of at least one of the two scroll subsections varying as the air proceeds from the impeller to an associated discharge opening.

Forni 5,156,524 (figures 1a-1b) shows a centrifugal fan (not shown) with a volute 30 having an axial dimension that varies as the air proceeds from the impeller to an associated unnumbered discharge opening, for the purpose of providing a substantially constant static pressure field around the circumference of the impeller, and improving performance.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified blower of White such that the axial dimension of one of the scroll subsections varies as the air proceeds from the impeller to an associated discharge opening, as taught by Forni, for the purpose of providing a substantially constant static pressure field around the circumference of the impeller, and improving performance.

Claims 1, 4, 7, 9-10, 12-15, and 21, as far as they are understood and definite, are also rejected under 35 U.S.C. 103(a) as being unpatentable over Swiss Patent 132,105 in view of Japanese Patent 61-247,899 and White 1,889,816 and Williams 2,330,938. The Swiss Patent (figures 3-5) discloses a centrifugal blower assembly substantially as claimed having a

centrifugal impeller 3/4 that receives air axially and discharges the air radially, a scroll diffuser (unnumbered) defining a single axial inlet opening near 1 for supplying air to the impeller, and a scroll section 6, 7 for collecting and discharging air from the impeller, and a partition 5 extending substantially in a radial plane mounted within an unnumbered housing with an inner opening receiving and having an edge in close proximity to and surrounding the periphery of the impeller, with the partition serving to divide the scroll interior into two discrete axially adjacent flows near 6, 7 for the discharge of air from the scroll section. The scroll section comprises discrete scroll subsections 6, 7 associated respectively with the two axially adjacent flows. The centerlines of the flows through the subsections differ (figure 5). As seen in figure 3, discharge openings of the two subsections are arranged in adjacent side-by-side relationship to provide an aggregate discharge opening of substantially enlarged width. As seen in figure 5, the discharge openings 6, 7 of two subsections are arranged in angularly spaced apart relationship. The scroll subsections have cutoff points (unnumbered, see figure 4) substantially at the same point circumferentially along the periphery of the impeller opening in the partition. As seen in figure 3, the scroll subsections have unnumbered discharge openings with substantially parallel centerlines. As seen in figure 5, the scroll subsections have discharge openings with centerlines angularly related to each other.

However, the Swiss Patent does not disclose an electric motor connected drivingly to the impeller (claim 1), does not explicitly disclose that the partition substantially completely surrounds the periphery of the impeller (claim 1), does not disclose that the scroll subsections are configured to provide different and independently optimized expansion angles (claim 1), does

not disclose that the least two scroll subsections have differing configurations of their outer walls, each spaced radially from but facing the periphery of the impeller (claim 4), does not disclose that the scroll subsections have cut-off points spaced circumferentially from each other (claim 13), and does not disclose a flow balancing restriction incorporated into at least one of the scroll subsections (claim 21).

Japanese Patent 61-247,899 (figure 1) shows a centrifugal fan 2 having an electric motor 3 associated with the fan, for the purpose of positively driving the centrifugal fan.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to drive the centrifugal blower of Swiss Patent 132,105 with an electric motor, as taught by Japanese Patent 58-101,297, for the purpose of positively driving the centrifugal fan.

White (figures 1-2) shows a centrifugal distributor for gases having a partition 14 that substantially completely surrounds the periphery of a centrifugal impeller 5, for the purpose of dividing the interior of a scroll B into two discrete axially adjacent flows near 12, 13 for the discharge of air from the scroll section.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified centrifugal blower of Swiss Patent 132,105 such that the partition substantially completely surrounds the periphery of the impeller, as taught by

White, for the purpose of dividing the interior of the scroll into two discrete axially adjacent flows for the discharge of air from the scroll section.

Williams shows a centrifugal blower assembly having a centrifugal impeller 60, a scroll diffuser near 20/26/36/37, and a scroll section 35, 44/45 for collecting and discharging air from the impeller, with a partition 31 having an edge in close proximity to the periphery of the impeller. The partition divides the scroll interior into two discrete axially adjacent flows near 35 and 44/45 for the discharge of air from the scroll section. The scroll section comprises discrete scroll subsections 35 and 44, 45 associated respectively with the two axially adjacent flows. The scroll subsections are configured to provide different and independently optimized expansion angles, the scroll subsections have differing configurations of their outer walls, and the scroll subsections have cut-off points 73 and 41 spaced circumferentially from each other, for the purpose of supplying air to different locations under differing pressure conditions. A flow balancing restriction is incorporated into the scroll subsections (column 4, lines 35-40), for the purpose of controlling the direction or extent of discharged air.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified centrifugal blower of Swiss Patent 132,105 such that the scroll subsections are configured to provide different and independently optimized expansion angles, such that the scroll subsections have differing configurations of their outer walls, each spaced radially from but facing the periphery of the impeller, and such that the scroll subsections have cut-off points spaced circumferentially from each other, as taught by Williams,

for the purpose of supplying air to different locations under differing pressure conditions. It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified centrifugal blower of Swiss Patent 132,105 such that a flow balancing restriction is incorporated into the scroll subsections, as taught by Williams, for the purpose of controlling the direction or extent of discharged air.

Claim 5, as far as it is understood and definite, is also rejected under 35 U.S.C. 103(a) as being unpatentable over Swiss Patent 132,105 and Japanese Patent 61-247,899 and White 1,889,816 and Williams 2,330,938 as applied to claim 1 above, and further in view of Forni 5,156,524. The modified blower assembly of Swiss Patent 132,105 shows all of the claimed subject matter except for the axial dimension of at least one of the two scroll subsections varying as the air proceeds from the impeller to an associated discharge opening.

Forni 5,156,524 (figures 1a-1b) shows a centrifugal fan (not shown) with a volute 30 having an axial dimension that varies as the air proceeds from the impeller to an associated unnumbered discharge opening, for the purpose of providing a substantially constant static pressure field around the circumference of the impeller, and improving performance.

It would have been further obvious at the time the invention was made to a person having ordinary skill in the art to form the modified blower of Swiss Patent 132,105 such that the axial dimension of one of the scroll subsections varies as the air proceeds from the impeller to an associated discharge opening, as taught by Forni, for the purpose of providing a substantially

constant static pressure field around the circumference of the impeller, and improving performance.

***Allowable Subject Matter***

Claims 6, 8, 11, and 16-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, first and second paragraphs, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C.V.
November 30, 2007

Christopher Verdier
Primary Examiner
Art Unit 3745